

# Section 5

## 1999 Motorcycle Total Crashes, Injury Crashes and Fatal Crashes

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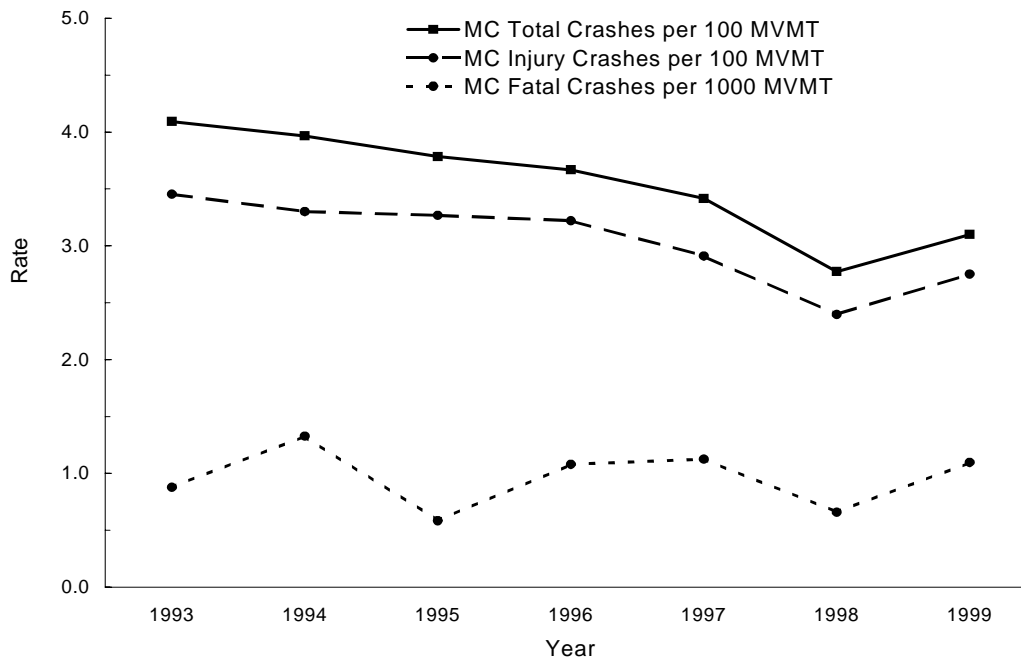
# 1993 - 1999 Motorcycle Crashes

Table 5.01 and Figure 5.01 show the trends in motorcycle crashes from 1993 to 1999. Total motorcycle crashes, and motorcycle injury crashes declined from 1993 to 1998, with the lowest number of crashes occurring in 1998. In 1999, there was a 15.1% increase in total motorcycle crashes and an 18.3% increase in motorcycle injury crashes. While, fatal motorcycle crashes vary from year to year, the small number of fatal motorcycle crashes makes it difficult to compare increases and decreases from year to year.

Table 5.01 Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1993-1999

Year	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	Rate per 100 MVMT	#	Rate per 100 MVMT	#	Rate per 1000 MVMT
1993	698	4.1	589	3.5	15	0.9
1994	717	4.0	597	3.3	24	1.3
1995	711	3.8	614	3.3	11	0.6
1996	713	3.7	626	3.2	21	1.1
1997	697	3.4	594	2.9	23	1.1
1998	589	2.8	509	2.4	14	0.7
1999	678	3.1	602	2.8	24	1.1

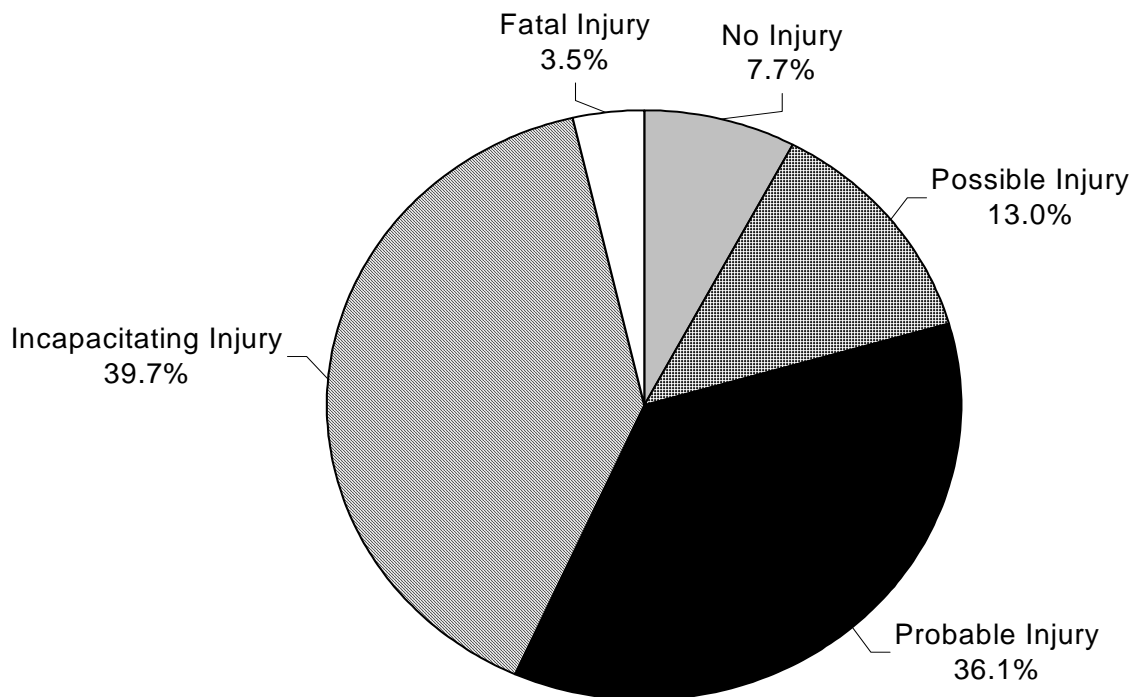
Figure 5.01 Motorcycle Total Crashes, Injury Crashes and Fatal Crashes, Utah 1993-1999



# 1999 Motorcycle Crash Severity

Figure 5.02 shows the breakdown of motorcycle crash severity. Almost all of the motorcycle crashes resulted in an injury (92.3%) compared to 37.6% of all motor vehicle crashes. The percentage of motorcycle crashes that resulted in a fatality was 3.5%; this four times the percentage for all motor vehicle crashes (0.6%).

Figure 5.02 Severity of Motorcycle Crashes as Reported by Police, Utah 1999 (n=678)



# 1999 Motorcycle Crashes by County

The rates of total motorcycle crashes, motorcycle injury crashes and motorcycle fatal crashes for each county are shown in Table 5.02. The top three counties for total motorcycle crashes and motorcycle injury crashes based on million vehicle miles traveled were Wayne, Daggett and Rich. The top three counties for fatal motorcycle crashes based on million vehicle miles traveled were Wayne, Rich and Garfield.

Table 5.02 Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes by County, Utah 1999

County	MC Total Crashes			MC Injury Crashes			MC Fatal Crashes		
	#	Rate per 100 MVMT	Rate per 10,000 Population	#	Rate per 100 MVMT	Rate per 10,000 Population	#	Rate per 1000 MVMT	Rate per 10,000 Population
Beaver	1	0.5	1.6	0	0.0	0.0	0	0.0	0.0
Box Elder	8	0.9	1.9	8	0.9	1.9	0	0.0	0.0
Cache	26	3.4	2.9	24	3.2	2.7	0	0.0	0.0
Carbon	3	0.9	1.4	3	0.9	1.4	0	0.0	0.0
Daggett	2	8.7	24.0	1	4.3	12.0	0	0.0	0.0
Davis	37	1.8	1.6	35	1.7	1.5	0	0.0	0.0
Duchesne	4	2.2	2.8	4	2.2	2.8	0	0.0	0.0
Emery	6	1.7	5.4	4	1.2	3.6	0	0.0	0.0
Garfield	4	3.0	8.6	1	0.8	2.2	1	7.6	2.2
Grand	6	2.2	6.0	5	1.8	5.0	1	3.6	1.0
Iron	12	2.2	3.8	9	1.6	2.8	1	1.8	0.3
Juab	2	0.6	2.5	2	0.6	2.5	0	0.0	0.0
Kane	3	2.4	4.2	2	1.6	2.8	0	0.0	0.0
Millard	5	1.2	4.0	5	1.2	4.0	0	0.0	0.0
Morgan	1	0.9	1.5	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	3	6.4	16.1	2	4.3	10.7	1	21.3	5.4
Salt Lake	281	3.9	3.3	248	3.4	2.9	10	1.4	0.1
San Juan	11	4.3	8.3	10	3.9	7.5	1	3.9	0.8
Sanpete	3	1.3	1.4	3	1.3	1.4	0	0.0	0.0
Sevier	8	2.1	4.2	8	2.1	4.2	0	0.0	0.0
Summit	4	0.7	1.6	4	0.7	1.6	0	0.0	0.0
Tooele	7	1.1	2.1	6	0.9	1.8	1	1.6	0.3
Uintah	11	4.0	4.5	8	2.9	3.3	0	0.0	0.0
Utah	122	4.2	3.7	118	4.0	3.5	3	1.0	0.1
Wasatch	10	4.1	7.3	7	2.9	5.1	1	4.1	0.7
Washington	36	4.3	4.5	32	3.8	4.0	2	2.4	0.3
Wayne	6	14.7	23.8	4	9.8	15.9	1	24.6	4.0
Weber	56	3.8	3.0	49	3.3	2.7	1	0.7	0.1
Statewide	678	3.1	3.2	602	2.8	2.9	24	1.1	0.1

# 1999 Motorcycle Crash Times

Total motorcycle crashes, and motorcycle injury crashes followed the same time pattern, peaking between 4 p.m. and 5 p.m. The highest proportion of fatal motorcycle crashes occurred from 1 p.m. to 2 p.m. and again from 6 p.m. to 7 p.m. (Table 5.03 and Figure 5.03).

Table 5.03 Hour of Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Hour	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
12 a.m.	13	1.9%	10	1.7%	1	4.2%
1 a.m.	7	1.0%	6	1.0%	1	4.2%
2 a.m.	2	0.3%	2	0.3%	0	0.0%
3 a.m.	7	1.0%	7	1.2%	0	0.0%
4 a.m.	1	0.1%	1	0.2%	0	0.0%
5 a.m.	5	0.7%	5	0.8%	0	0.0%
6 a.m.	11	1.6%	10	1.7%	0	0.0%
7 a.m.	4	0.6%	3	0.5%	0	0.0%
8 a.m.	11	1.6%	8	1.3%	0	0.0%
9 a.m.	17	2.5%	17	2.8%	0	0.0%
10 a.m.	19	2.8%	17	2.8%	1	4.2%
11 a.m.	31	4.6%	29	4.8%	1	4.2%
12 p.m.	31	4.6%	27	4.5%	0	0.0%
1 p.m.	45	6.6%	39	6.5%	3	12.5%
2 p.m.	56	8.3%	50	8.3%	3	12.5%
3 p.m.	56	8.3%	46	7.6%	1	4.2%
4 p.m.	68	10.0%	62	10.3%	0	0.0%
5 p.m.	61	9.0%	54	9.0%	1	4.2%
6 p.m.	54	8.0%	46	7.6%	3	12.5%
7 p.m.	45	6.6%	40	6.6%	3	12.5%
8 p.m.	36	5.3%	35	5.8%	1	4.2%
9 p.m.	46	6.8%	41	6.8%	2	8.3%
10 p.m.	32	4.7%	28	4.7%	2	8.3%
11 p.m.	20	2.9%	19	3.2%	1	4.2%
Grand Total	678	100.0%	602	100.0%	24	100.0%

Figure 5.03 Hour of Motorcycle (MC) Injury Crashes and Fatal Crashes, Utah 1999 (See Table 5.03 for values)

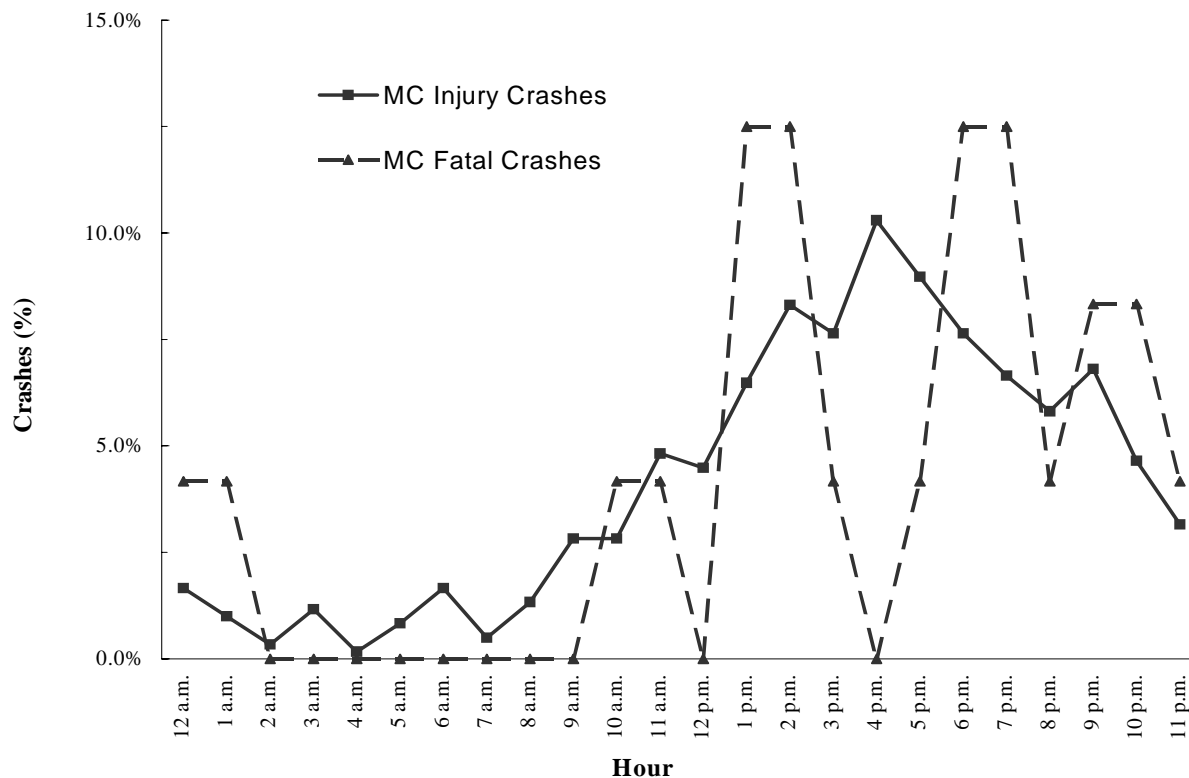


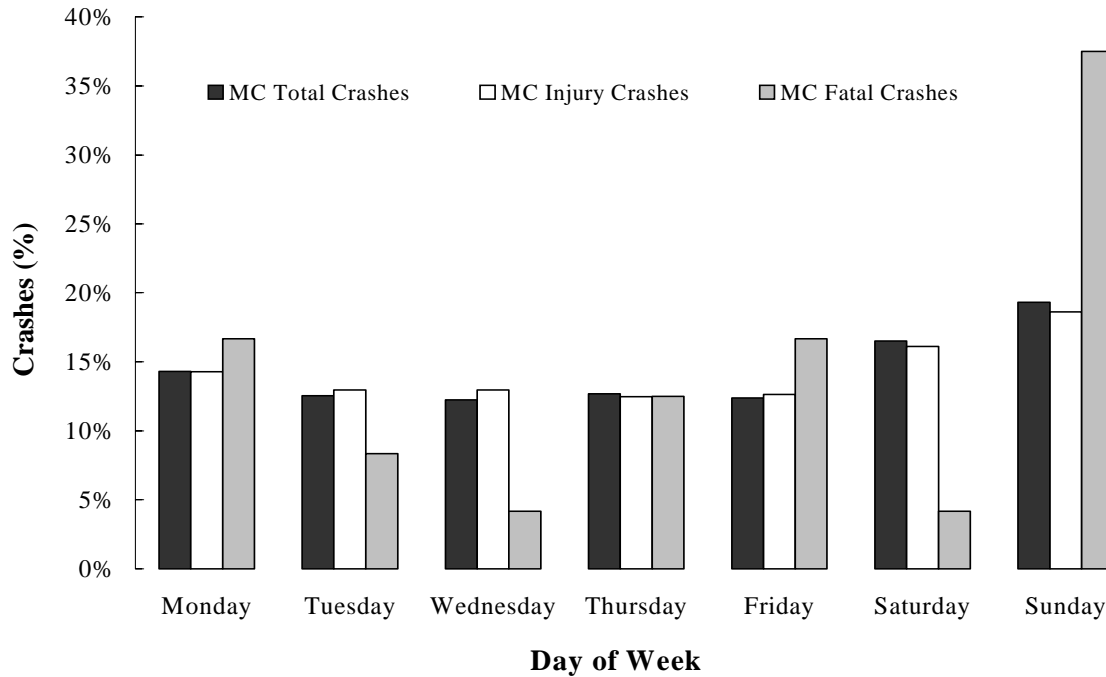
Table 5.04 shows the number of total motorcycle crashes and the rate of total motorcycle crashes per day for each month. May through September had the highest rate of total motorcycle crashes, injury crashes and fatal crashes per day. Very few motorcycle crashes occurred in the winter months, which may be due to the decrease of individuals riding motorcycles in the winter.

Table 5.04 Month of Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Crash Month	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	11	0.4	10	0.3	0	0.0
February	18	0.6	17	0.6	1	0.0
March	42	1.4	35	1.1	1	0.0
April	43	1.4	39	1.3	2	0.1
May	82	2.6	75	2.4	1	0.0
June	92	3.1	85	2.8	3	0.1
July	91	2.9	81	2.6	4	0.1
August	97	3.1	88	2.8	2	0.1
September	96	3.2	81	2.7	7	0.2
October	67	2.2	60	1.9	1	0.0
November	32	1.1	27	0.9	2	0.1
December	7	0.2	4	0.1	0	0.0
Grand Total	678	1.9	602	1.6	24	0.1

The largest number of total motorcycle crashes and motorcycle injury crashes occurred on Saturday and Sunday (Figure 5.04 and Table 5.05). Fatal motorcycle crashes most frequently occurred on Sunday, accounting for 37.5% of all fatal motorcycle crashes. In fact, motorcycle crashes on Sunday were 3 times more likely to be fatal than motorcycle crashes occurring on other days.

Figure 5.04 Day of Week for Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the days of the week. For example, look at only the white bars (i.e. motorcycle injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 5.05 Day of Week for Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Day of Week	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
Monday	97	14.3%	86	14.3%	4	16.7%
Tuesday	85	12.5%	78	13.0%	2	8.3%
Wednesday	83	12.2%	78	13.0%	1	4.2%
Thursday	86	12.7%	75	12.5%	3	12.5%
Friday	84	12.4%	76	12.6%	4	16.7%
Saturday	112	16.5%	97	16.1%	1	4.2%
Sunday	131	19.3%	112	18.6%	9	37.5%
Grand Total	678	100.0%	602	100.0%	24	100.0%

# 1999 Motorcycle Crash Characteristics

Table 5.06 shows that crashes involving another motor vehicle represented most of the total motorcycle crashes (48.4%). “Ran off the roadway “ (to the right, to the left, or through the median), accounted for one-third (33.3%) of the fatal motorcycle crashes.

Table 5.06 Types of Total Crashes, Injury Crashes and Fatal Crashes Involving Motorcycles (MC), Utah 1999

Crash Type	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
Two Motor Vehicles	328	48.4%	285	47.3%	8	33.3%
Overtaken in Roadway	107	15.8%	102	16.9%	1	4.2%
Ran Off Roadway - To the Right	82	12.1%	73	12.1%	5	20.8%
Other Non-Collision	46	6.8%	44	7.3%	1	4.2%
Motor Vehicle and Fixed Object	34	5.0%	29	4.8%	3	12.5%
Motor Vehicle and Wild Animal	25	3.7%	22	3.7%	1	4.2%
Ran Off Roadway - To the Left	19	2.8%	16	2.7%	1	4.2%
Motor Vehicle and Other Object	15	2.2%	13	2.2%	1	4.2%
Ran Off Roadway Through Median	9	1.3%	7	1.2%	2	8.3%
Motor Vehicle and Domestic Animal	8	1.2%	7	1.2%	0	0.0%
Motor Vehicle and Bicycle	4	0.6%	4	0.7%	0	0.0%
Motor Vehicle and Pedestrian	1	0.1%	0	0.0%	1	4.2%
Grand Total	678	100.0%	602	100.0%	24	100.0%

The majority of total motorcycle crashes (58.6%) occurred in large urban areas (Table 5.07). However, the largest percentage of fatal motorcycle crashes (66.7%) occurred in rural areas. Rural motorcycle crashes were 4 times more likely to result in a fatality compared to motorcycle crashes in other areas.

Table 5.07 Urban / Rural Location of Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Urban / Rural Location	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
Rural Area - Up to 5,000	230	33.9%	194	32.2%	16	66.7%
Small Urban - 5,000 to 49,999	38	5.6%	36	6.0%	0	0.0%
Moderate Urban - 50,000 to 199,999	13	1.9%	11	1.8%	0	0.0%
Large Urban - 200,000 or More	397	58.6%	361	60.0%	8	33.3%
Grand Total	678	100.0%	602	100.0%	24	100.0%



Table 5.08 shows that the leading collision types for total motorcycle crashes were single vehicle rollovers (31.9%) and broadsides (24.3%). These were also the leading collision types for injury motorcycle crashes at 34.4% and 24.8%, respectively. Single vehicle fixed object accounted for one-third (33.3%) of fatal motorcycle crashes.

Table 5.08 Collision Description of Motorcycle (MC) Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Collision Description	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
Single Vehicle Rollover	216	31.9%	207	34.4%	3	12.5%
Broadside	165	24.3%	149	24.8%	3	12.5%
Other	94	13.9%	80	13.3%	2	8.3%
Rear End	85	12.5%	70	11.6%	2	8.3%
Single Vehicle Fixed Object	62	9.1%	51	8.5%	8	33.3%
Side Swipe	31	4.6%	23	3.8%	3	12.5%
Single Vehicle Other	13	1.9%	11	1.8%	2	8.3%
Head-on	7	1.0%	7	1.2%	0	0.0%
Pedestrian/Bicyclist Crash	5	0.7%	4	0.7%	1	4.2%
Grand Total	678	100.0%	602	100.0%	24	100.0%

# 1999 Motorcycle Crash Violations and Contributing Factors

Over one-third (37.0%) of motorcycle drivers involved in crashes received a citation (Table 5.09). The leading violations cited were "all other non-moving violations" (25.1%), and "reckless driving" (11.8%). In addition, one citation was given to a motorcycle driver involved in fatal crash, and it was for "driving under the influence."

Table 5.09 Violations for Motorcycle (MC) Total Crashes and Injury Crashes, Utah 1999

Violations	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
All other non-moving violations	64	25.1%	62	27.0%	0	0.0%
Reckless driving	30	11.8%	30	13.0%	0	0.0%
All other moving violations	29	11.4%	27	11.7%	0	0.0%
Speeding	28	11.0%	26	11.3%	0	0.0%
Improper lookout	26	10.2%	20	8.7%	0	0.0%
Driving under the influence	22	8.6%	19	8.3%	1	100.0%
Following too close	9	3.5%	6	2.6%	0	0.0%
Negligent collision	8	3.1%	7	3.0%	0	0.0%
Improper passing	6	2.4%	5	2.2%	0	0.0%
Improper lane change	4	1.6%	3	1.3%	0	0.0%
Red light	2	0.8%	2	0.9%	0	0.0%
Improper turn	1	0.4%	1	0.4%	0	0.0%
Stop sign	1	0.4%	1	0.4%	0	0.0%
Hit and run	1	0.4%	1	0.4%	0	0.0%
Grand Total	255	100.0%	230	100.0%	1	100.0%

Table 5.10 shows that the leading contributing factor for total motorcycle crashes was "speed too fast"; accounting for 28.0% of contributing factors for total motorcycle crashes, and for 42.3% of the contributing factors in fatal motorcycle crashes. The contributing factors "driving under the influence", "had been drinking", and "under the influence of drugs" accounted for 6.2% of total motorcycle crashes and 7.7% of the fatal motorcycle crashes.

Table 5.10 Contributing Factors of Motorcycle Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Contributing Factors	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	#	%	#	%	#	%
Speed Too Fast	141	28.0%	125	28.2%	11	42.3%
Other Improper Driving	113	22.4%	101	22.8%	7	26.9%
Improper Lookout	70	13.9%	61	13.8%	1	3.8%
Failed to Yield the Right of Way	20	4.0%	17	3.8%	0	0.0%
Following Too Closely	20	4.0%	15	3.4%	0	0.0%
Driving Under the Influence	19	3.8%	17	3.8%	0	0.0%
Drove Left of Center	14	2.8%	11	2.5%	1	3.8%
Had Been Drinking	11	2.2%	9	2.0%	2	7.7%
Improper Overtaking	17	3.4%	16	3.6%	0	0.0%
Non-Contact Vehicle Involved	16	3.2%	15	3.4%	1	3.8%
Improper Turn	7	1.4%	5	1.1%	1	3.8%
Disregarded Traffic Signal	8	1.6%	7	1.6%	1	3.8%
Tires Defective	9	1.8%	9	2.0%	0	0.0%
Fatigued	4	0.8%	3	0.7%	1	3.8%
Hit and Run	4	0.8%	4	0.9%	0	0.0%
Other Defective Condition	7	1.4%	7	1.6%	0	0.0%
Passed Stop Sign	2	0.4%	2	0.5%	0	0.0%
Headlights Insufficient or Out	4	0.8%	4	0.9%	0	0.0%
Asleep	0	0.0%	0	0.0%	0	0.0%
Brakes Defective	3	0.6%	2	0.5%	0	0.0%
Other Lights or Reflecting/Defective	0	0.0%	0	0.0%	0	0.0%
Down Hill Runaway	0	0.0%	0	0.0%	0	0.0%
Headlights Glaring	0	0.0%	0	0.0%	0	0.0%
Under the Influence of Drugs	1	0.2%	1	0.2%	0	0.0%
Grand Total	504	100.0%	443	100.0%	26	100.0%

# 1999 Motorcycle Drivers Involved in Crashes

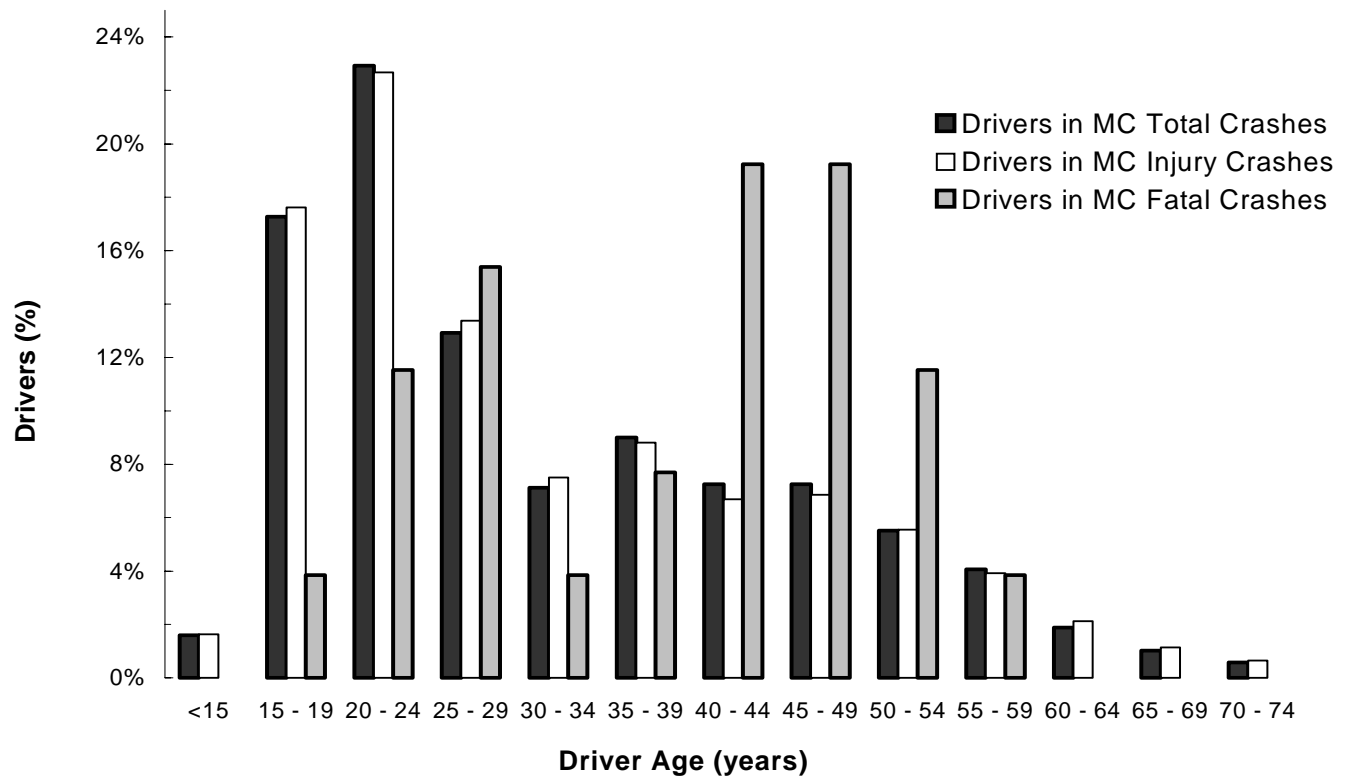
Over one-half (54.7%) of the motorcycle drivers involved in total crashes were under the age of 30 years (Table 5.11). The number of motorcycle drivers involved in total crashes and injury crashes was highest for younger drivers (20-24 years) and decreased with increasing age. The number of motorcycle drivers involved in fatal crashes was highest between the ages of 40 and 49 years, but clear patterns were not apparent due in part to the small number of fatal motorcycle crashes.

In order to drive a motorcycle on public roads in the state of Utah, a person must pass both written and on-motorcycle riding tests which allows them to obtain an "M" class driver license (an endorsement on the regular "D" license).

Table 5.11 Age of Motorcycle (MC) Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Driver's Age	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	# Drivers	%	# Drivers	%	# Drivers	%
<15	11	1.6%	10	1.6%	0	0.0%
15 - 19	119	17.3%	108	17.6%	1	3.8%
20 - 24	158	22.9%	139	22.7%	3	11.5%
25 - 29	89	12.9%	82	13.4%	4	15.4%
30 - 34	49	7.1%	46	7.5%	1	3.8%
35 - 39	62	9.0%	54	8.8%	2	7.7%
40 - 44	50	7.3%	41	6.7%	5	19.2%
45 - 49	50	7.3%	42	6.9%	5	19.2%
50 - 54	38	5.5%	34	5.5%	3	11.5%
55 - 59	28	4.1%	24	3.9%	1	3.8%
60 - 64	13	1.9%	13	2.1%	0	0.0%
65 - 69	7	1.0%	7	1.1%	0	0.0%
70 - 74	4	0.6%	4	0.7%	0	0.0%
75 - 79	1	0.1%	0	0.0%	1	3.8%
Missing	10	1.5%	9	1.5%	0	0.0%
Grand Total	689	100.0%	613	100.0%	26	100.0%

Figure 5.05 Age of Motorcycle Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999



Note: The above graph is based on percentages for the different crash categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. drivers in motorcycle injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Most motorcycle drivers (93.6%) involved in crashes were male (Table 5.12). This does not necessarily indicate that male motorcycle drivers are at greater risk for a crash, but may reflect the higher proportion of male motorcycle drivers in Utah.

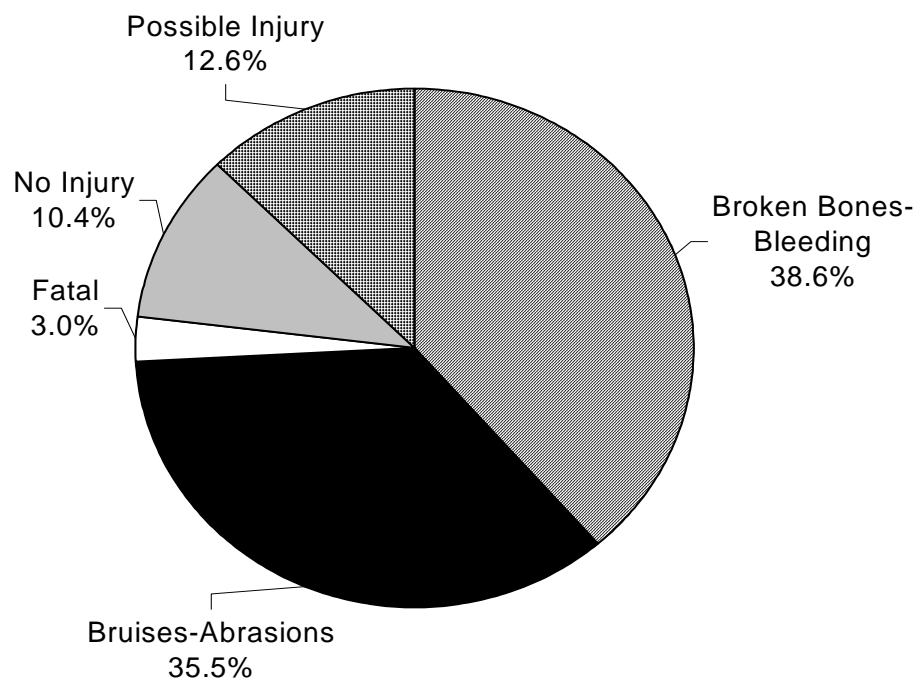
Table 5.12 Gender of Motorcycle (MC) Drivers Involved in Total Crashes, Injury Crashes and Fatal Crashes, Utah 1999

Driver's Gender	MC Total Crashes		MC Injury Crashes		MC Fatal Crashes	
	# Drivers	%	# Drivers	%	# Drivers	%
Female	42	6.1%	37	6.0%	3	11.5%
Male	645	93.6%	574	93.6%	23	88.5%
Missing	2	0.3%	2	0.3%	0	0.0%
Grand Total	689	100.0%	613	100.0%	26	100.0%

# 1999 Motorcyclist Injury Severity

Motorcyclists involved in a crash were injured at a much higher percentage (89.6%) compared to all other motor vehicle crash participants (21.7%). A fatal injury was sustained by 3.0% of motorcyclist compared to 0.3% of all motor vehicle crash participants. Fatalities were 10 times higher for motorcyclists than for other motor vehicle crash participants.

Figure 5.06 Motorcyclist Injury Severity as Reported by Police, Utah 1999 (n=689)



# 1999 Motorcyclists by County

Table 5.13 shows that while Salt Lake County has the largest number of total motorcyclists, injured motorcyclists and motorcyclists killed in crashes, the county did not have the highest rates per population. Rich County had the highest rate per population of motorcyclist injuries and fatalities.

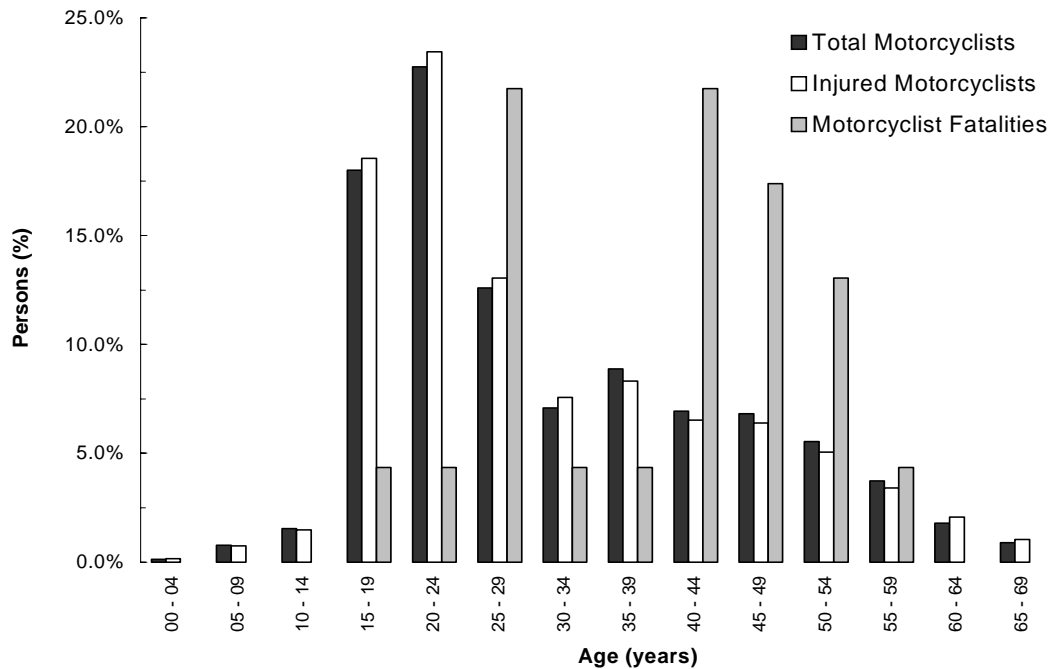
Table 5.13 Total Motorcyclists, Injured Motorcyclists and Motorcyclist Fatalities by County, Utah 1999

County	Total Motorcyclists		Injured Motorcyclists		Motorcyclist Fatalities	
	#	Rate Per 100,000 Population	#	Rate Per 100,000 Population	#	Rate Per 100,000 Population
Beaver	0	0.0	0	0.0	0	0.0
Box Elder	9	21.8	7	16.9	0	0.0
Cache	28	31.0	26	28.8	0	0.0
Carbon	3	13.5	3	13.5	0	0.0
Daggett	2	240.1	1	120.0	0	0.0
Davis	42	18.4	40	17.5	0	0.0
Duchesne	5	35.0	4	28.0	0	0.0
Emery	6	54.3	4	36.2	0	0.0
Garfield	5	107.7	1	21.5	1	21.5
Grand	7	70.3	6	60.3	1	10.0
Iron	12	37.7	9	28.3	1	3.1
Juab	2	25.4	2	25.4	0	0.0
Kane	4	56.3	2	28.1	0	0.0
Millard	8	63.9	8	63.9	0	0.0
Morgan	1	14.6	0	0.0	0	0.0
Piute	0	0.0	0	0.0	0	0.0
Rich	5	268.7	4	214.9	1	53.7
Salt Lake	323	38.0	276	32.5	9	1.1
San Juan	13	97.5	12	90.0	1	7.5
Sanpete	3	14.1	3	14.1	0	0.0
Sevier	8	42.4	8	42.4	0	0.0
Summit	7	27.4	6	23.5	0	0.0
Tooele	7	20.5	6	17.6	1	2.9
Uintah	14	57.2	9	36.7	0	0.0
Utah	141	42.2	133	39.8	3	0.9
Wasatch	11	80.7	8	58.7	1	7.3
Washington	43	53.9	37	46.3	2	2.5
Wayne	7	277.8	4	158.7	1	39.7
Weber	62	33.6	55	29.8	1	0.5
Statewide	778	37.0	674	32.1	23	1.1

# 1999 Motorcyclist Characteristics

The largest number of total motorcyclists and injured motorcyclists were aged 20 to 24 years (Figure 5.07 and Table 5.14). Motorcycle crash fatalities occurred most often in the 25 to 29, and 40 to 44 year age groups.

Figure 5.07 Age of Total Motorcyclists, Injured Motorcyclists and Motorcyclist Fatalities, Utah 1999



Note: The above graph is based on percentages for the different injury categories. To read the above graph, look at one category across the age groups. For example, look at only the white bars (i.e. injured motorcyclist) from age group to age group. Do not compare the heights of the different injury categories for a specific age group.



Table 5.14 Age of Motorcyclists, Injured Motorcyclists and Motorcyclist Fatalities, Utah 1999

Age	Total Motorcyclists		Injured Motorcyclists		Motorcyclist Fatalities	
	#	%	#	%	#	%
00 - 04	1	0.1%	1	0.1%	0	0.0%
05 - 09	6	0.8%	5	0.7%	0	0.0%
10 - 14	12	1.5%	10	1.5%	0	0.0%
15 - 19	140	18.0%	125	18.5%	1	4.3%
20 - 24	177	22.8%	158	23.4%	1	4.3%
25 - 29	98	12.6%	88	13.1%	5	21.7%
30 - 34	55	7.1%	51	7.6%	1	4.3%
35 - 39	69	8.9%	56	8.3%	1	4.3%
40 - 44	54	6.9%	44	6.5%	5	21.7%
45 - 49	53	6.8%	43	6.4%	4	17.4%
50 - 54	43	5.5%	34	5.0%	3	13.0%
55 - 59	29	3.7%	23	3.4%	1	4.3%
60 - 64	14	1.8%	14	2.1%	0	0.0%
65 - 69	7	0.9%	7	1.0%	0	0.0%
70 - 74	4	0.5%	4	0.6%	0	0.0%
75 - 79	1	0.1%	0	0.0%	1	4.3%
Missing	15	1.9%	11	1.6%	0	0.0%
Grand Total	778	100.0%	674	100.0%	23	100.0%

Table 5.15 shows that the majority (86.8%) of motorcycle crash participants and motorcycle fatalities were male.

Table 5.15 Gender of Motorcyclists, Injured Motorcyclists and Motorcyclist Fatalities, Utah 1999

Gender	Motorcyclists		Injured Motorcyclists		Motorcyclist Fatalities	
	#	%	#	%	#	%
Female	100	12.9%	88	13.1%	3	13.0%
Male	675	86.8%	585	86.8%	20	87.0%
Missing	3	0.4%	1	0.1%	0	0.0%
Grand Total	778	100.0%	674	100.0%	23	100.0%

Examination of the crash placement (driver vs passenger) shows that drivers accounted for the majority (88.7%) of injured motorcyclists (Table 5.16). Motorcycle drivers and motorcycle passengers had a similar rate of fatal injuries. In addition, there were 9 pedestrians and bicyclists involved in motorcycle crashes; 8 sustained non-fatal injuries, and 1 sustained a fatal injury.

Table 5.16 Crash Placement of Total Motorcyclists, Injured Motorcyclists, and Motorcyclist Fatalities, Utah 1999

<b>Crash Placement</b>	<b>Total Motorcyclists</b>		<b>Injured Motorcyclists</b>		<b>Motorcyclist Fatalities</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Driver	689	88.6%	598	88.7%	20	87.0%
Passenger	89	11.4%	76	11.3%	3	13.0%
Grand Total	778	100.0%	674	100.0%	23	100.0%

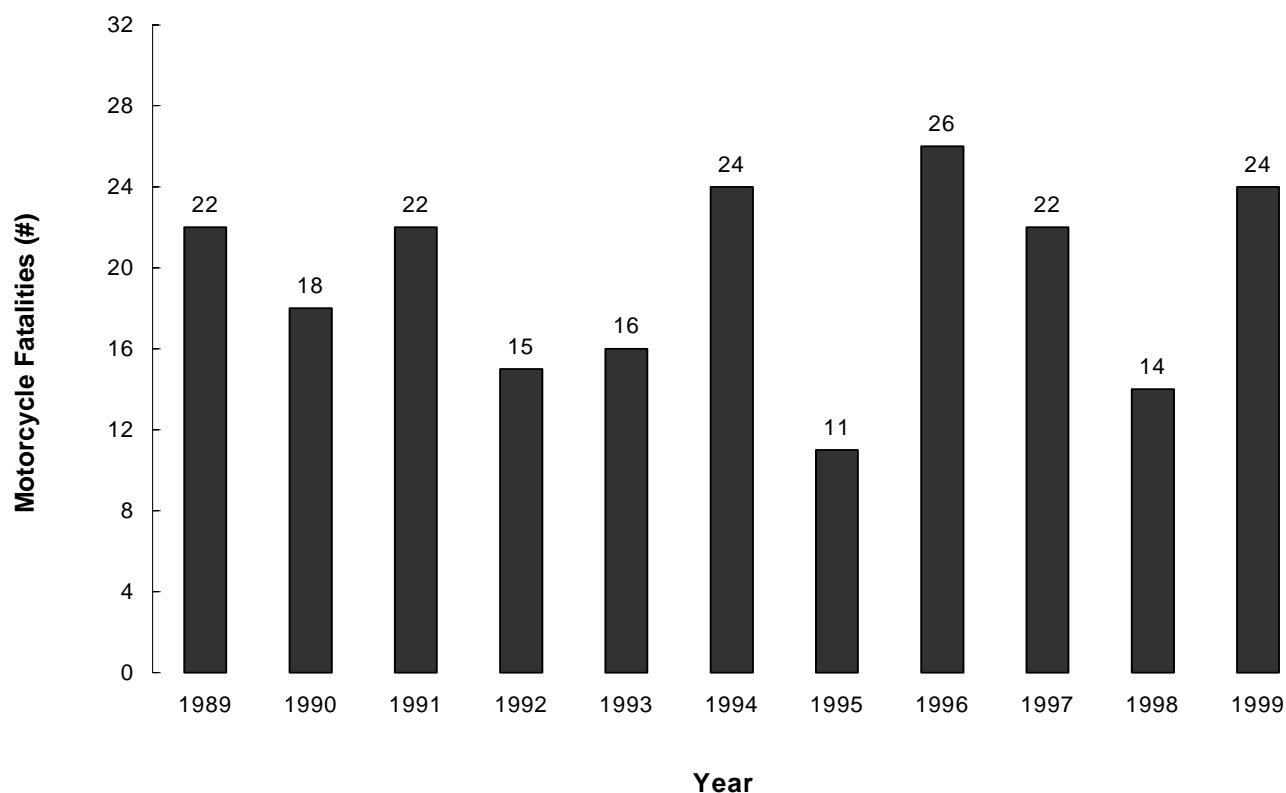
Only 29.6% of motorcycle drivers and passengers involved in crashes wore a helmet (Table 5.17). The percentage of helmet use was similar for those who were injured (30.9%), but only 17.4% of motorcycle driver and passenger fatalities used helmets. Utah law states that anyone under the age of 18 years riding a motorcycle either as the driver or as a passenger must wear a helmet approved by the Department of Public Safety.

Table 5.17 Helmet Use by Total Motorcyclists Involved in Crashes, Utah 1999

<b>Helmet</b>	<b>Total Motorcyclists</b>		<b>Injured Motorcyclists</b>		<b>Motorcyclist Fatalities</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Used	230	29.6%	208	30.9%	4	17.4%
Not Used / Unknown	548	70.4%	466	69.1%	19	82.6%
Grand Total	778	100.0%	674	100.0%	23	100.0%

In 1999, there were 24 motorcycle crash fatalities, a 71.4% increase from 1998. For the past 10 years the number of motorcyclist fatalities has fluctuated each year. The low occurred in 1995 with 11 fatalities, and the high was in 1996 with 26 fatalities (Figure 5.08). However, with the small number of fatalities, it is difficult to compare increases and decreases from year to year, therefore, these numbers should be interpreted with caution.

Figure 5.08 Motorcyclist Crash Fatalities, Utah 1989 - 1999



#### **Alcohol and Other Drugs:**

Of the 23 fatal motorcycle crashes, 4 involved alcohol and other drug use by the motorcycle driver.